Estimating with Rounding

Standards

Common Core

Numbers and Operations in Base Ten 3 NBT

Use place value understanding and properties of operations to perform multi-digit arithmetic

1. Use place value understanding to round whole numbers to the nearest 10 or 100.

**Focus and Review**

Teacher request attention and check for place value understanding by display on the board any number and asking students to identify digit on the place value mention. Teacher will present a video that shows the importance of estimation. [www.youtube.com/watch?v=0\_zbkUzg868](http://www.youtube.com/watch?v=0_zbkUzg868)

Teacher will asked students” Based on what they saw on the video what is estimation? Why do they think it is important? When do they think they can use estimation? Based on students responses teacher will explain that estimation is an estimated guess and it is use when an exact answer is not needed.

**Objective:**

At the end of this lesson the students will estimate by rounding to the nearest 10 and 100

**Materials:**

Computer with Internet access

Whiteboards, dry erase markers

Pencil, math journals, worksheet

**Teacher Input**

1. \*Intro: “Today, we are going to learn how to round numbers. Rounding numbers makes them easier to work with in your head! For example, say you were at the book fair and you only had $10 to spend. You end up picking out two books that cost $4.99 each. If you know how to round off numbers and add them in your head, you will know approximately how much each item will cost and if you will have enough money. We use rounding to get a number that is close—but not exact.”

2. Teacher will let students know that they are going to learn how to estimate with rounding.

3. Teacher will explain steps of rounding. Teacher will emphasize the importance of number value that dictate weather a number should be round up or down.

**Guide Practice**

1. Teacher hands out whiteboards and on the board will display number to be round to the nearest 10 or 100

2 Teacher with students’ collaboration will follow the steps previously explained to round numbers.

3. Teacher will ask the following question: What is the first thing that we need? (Locate the number to be round), what is the second thing that we need to do? (Look to the number on the right), what is the next thing that we will need to do? (If the number on the right is five or bigger then round up, If is less than four then round down)

**Independent Practice**

1Teacher will display on the board additional practice that student will complete individually.

2. Steps for rounding will be on the board for student reference.

3. Teacher will monitor students by walking around and answering any questions.

**Closure**

1. Teacher will collect work.

2. Students will write in their journal the steps for rounding.

3. Teacher will pass assignment and explain to students assignment procedures.

4. If time is available teacher will play the song the students will be working with on the following class.

<http://kidsknowit.com/educational-songs/play-educational-song.php?song=Slip%20To%20The%20Side>

**Modifications**

1. Partner up advanced learners and have them time each other to see how fast they can round their numbers. They can also race each other and the first one that completes their problem correctly gets a point. Advanced learners can round larger numbers to the nearest 10, 100 or 1,000. They can also round larger numbers to the nearest 10,000, 100,000 etc.

2. For learners with special needs have them work together with a partner or group to complete their Rounding sheet.

**Assessment**

Homework assigned will be used as the summative assessment. Checking for correct procedure used to round numbers to the nearest 10 or 100. Check for understanding of the concept that when rounding to the nearest ten or hundred, a 0-4 in the one’s or ten’s place respectively rounds down and 5-9 in the one’s or ten’s place respectively rounds the up

**Home Connection**

Students can show their family members how they learned to round without using a number line. Those students who are advanced learners can race their parents or siblings when rounding different numbers to the nearest 10’s, 100’s, or 1,000’s.